

## Type-B, CVN-77, Nov 2011

### INCLINED LADDER REMOVABLE / RETRACTABLE HANDRAIL EXTENSION

#### FEEDBACK FORM

In response to feedback from fleet sailors and the Naval Safety Center, NAVSEA is investigating alternatives to enhance the design of handrails on shipboard inclined ladders in way of hatches. Your review of this design prototype will help us in efforts to provide the safest and most efficient products to serve your needs. Further information on this project may be found at:

<http://www.public.navy.mil/navsafecen/Pages/Afloat/Surface/SWLaddersSaf.aspx>.

The inclined ladder removable / retractable handrail extension was installed as a prototype for evaluation in accordance with the following activities:

Defense Safety Oversight Council (DSOC)

Naval Safety Center

NAVSEA 05Z

Naval Surface Warfare Center (NSWC) Code 974

Note: There are two handrail extension designs that are being evaluated. Please verify the ladder location and type in all feedback responses.

A. Removable Handrail Extension – This design has a removable upper handrail section that is stowed on the deck above the inclined ladder.

B. Retractable Handrail Extension – This design has a retractable upper handrail section that stows within the lower handrail of the inclined ladder.

Please provide feedback to the questions below in addition to any comments, questions or recommendations. It is recommended that the ship's Safety Officer and Damage Control Assistant collect all comments, complete and forward this form to the contact listed.

1. Have any falls or other accidents occurred on this ladder since the removable / retractable handrail extension modification has been accomplished?

Yes \_\_\_\_\_ No ☒

If Yes, please explain \_\_\_\_\_ N/A

2. In your observation, has the presence of the removable / retractable handrail extension prevented any falls?

Yes ☒ No \_\_\_\_\_

If Yes, please explain \_\_\_\_\_ Handrails help greatly when transiting from the wet hangar bay to the ladder well, helps stability, less slipping and less problems with carrying gear from Hanger Bay up ladder well.

3. Has the removable / retractable handrail extension caused any operational problems since installed?

Yes \_\_\_\_\_ No ☒

Inspected by DC (SW) HARRISON  




If Yes, please explain \_\_\_\_\_ N/A

4. Compared with the original chain handrail design, how would you rate the effectiveness of the removable / retractable handrail extension?

Much worse: Trial version creates operation problems	Not quite as good: Might create operational problems	About as good/ no big change	A little better: Less likely to create problems	Much better: Much less apt to create operational problems
-2	-1	0	+1	+2

Please explain: \_\_\_\_\_ Handrails help greatly when transiting from the wet Hangar Bay to the ladder well, helps stability, less slipping and less problems with carrying gear from Hanger Bay up ladder well.

5. Has the removable / retractable handrail extension caused any access problems, either in the installed or stowed position?

Yes \_\_\_\_\_ No ☒

If Yes, please explain \_\_\_\_\_ N/A

6. Have there been any problems with the removable / retractable handrail extension in the installed position?

Yes ☒ No \_\_\_\_\_

If Yes, please explain \_\_\_\_\_ The top 2 stanchions are made of a smaller diameter pipe, this smaller weaker pipe is starting to weaken allowing the side to bow out slightly, this is allowing the hand rails to become unsteady and sway. Push pins do not line up with holes in railing when hand rail pins are in place.

7. Have there been any problems with the removable / retractable handrail extension in the stowed position?

Yes \_\_\_\_\_ No ☒

If Yes, please explain \_\_\_\_\_ N/A

8. Please estimate how many times the removable / retractable handrail extension has been installed and removed / extended and retracted for hatch closing?

None	1-5	6-10	11-20	> 20
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9. Please estimate if the time required for closing the hatch been adversely affected by the removal and stowage / retraction of the handrail extension?

Much worse: Trial version takes much longer to remove and store	Not quite as good: Trial version takes a little longer to remove and store	About as good/ no big change	A little better: Trial version is a little easier/quicker to remove and store	Much better: Trial version is much easier/quicker to remove and store
-2	-1	0	+1	+2

Please explain: \_\_\_\_\_



Hatch requires 3 personnel to close now vice the normal 2

10. Does the handrail extension show excessive signs of wear or other damage?

Yes ☒ No ☐

If Yes, please explain 1-Top supporting brackets starting to spread apart  
2-Ladder pin holes getting larger, warped

11. Has the handrail extension required any repair or modification since installation?

Yes ☒ No ☐

If Yes, please explain 1-Need to re-tighten handrail bolts about once to twice a week due to short studded fasteners

12. Please provide an overall evaluation of how the handrail extension affects ladder safety.

Much worse: Much less safe than current design	Not quite as good: Not quite as safe as current design	About as good/ no big change	A little better: Trial version is a little safer than current design	Much better: Trial version is a big improvement for safety
-2	-1	0	+1	+2

If you have any additional comments, please list here Have received many positive comments on handrails, personnel prefer to have a handrail to hold onto vice a chain, also commented on ease being able to transit with gear up and down the ladder well.

Recommend having these installed on ladders where a bathroom is up one deck from a berthing area, personnel try to transit up and down ladders with wet shower shoes, this creates a big slip hazard.

Thank you for your feedback.

Please forward this completed feedback form to:

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Philadelphia, PA 19112  
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